



AMERICAN-MARSH PUMPS

“DURABILITY BY DESIGN SINCE 1873”

300 Series Close & Flex-Coupled End Suction Pumps

**Flows to: 4,500 GPM
Heads to: 375 Feet
Temperatures to: 250° F**

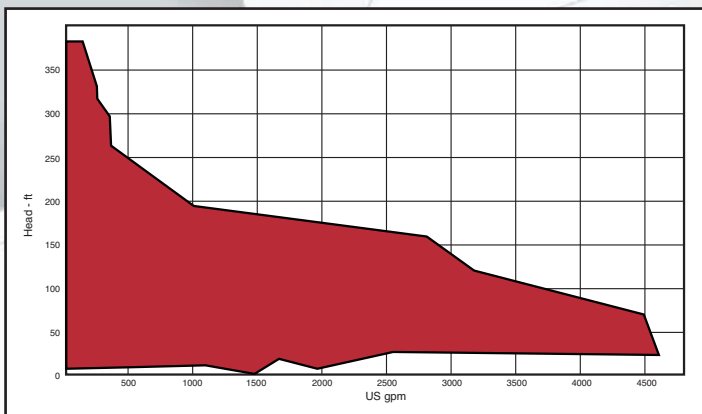
135 Years of Pump Manufacturing

American-Marsh Pumps, one of the oldest pump lines in America, are pump products steeped in heritage. Since 1873, the American-Marsh line of pumps has withstood the test of time. During the last 135 years, over 100 varieties of pumps have been designed and built. From steam pumps to centrifugal pumps, American-Marsh pumps have been built to meet the ever changing requirements of society. Over the last century through continuous product development, more American-Marsh models have been retired than most other pump manufacturers have ever produced. Hundreds of thousands of pumps have been made, all designed for longevity, allowing many of them to continue servicing customers over 50 years.

All of our pumps have three superior characteristics; Design, Performance, and Durability. Our engineering department, which includes an in-house pattern shop, designs each pump so that installation and maintenance is easy. Our performances are engineered to meet or beat the competition in each category. For 135

years, American-Marsh Pumps products have provided cost effective solutions by building pumps to last. Durability by design is always the most cost effective solution. From engineering and design to final assembly, experienced people control each step of the manufacturing process with quality control inspections performed at each step. All pumps shafts are heat straightened. All impellers are computer balanced. Pump testing is done in our new state of the art test facility. All of these factors ensure you receive consistent quality product every time.

American-Marsh Pumps has provided quality pump products for over 135 years. At American-Marsh Pumps, we know that long life and superior performance are the keys to satisfied customers. By understanding your needs, we can design products that meet those needs. Our product family reflects years of customer input, product upgrades, redesign and new product development, all focused on meeting and exceeding your expectations.





AMERICAN-MARSH PUMPS

Specifications

RDC & RDF Series

Casing: The casing is constructed of high tensile ductile iron or other specified material. It is of the volute type, carefully and accurately proportioned to permit smooth flow and to convert high velocity energy of the fluid as it leaves the impeller in pressure. Suction and discharge nozzles are cast integral with the volute. The suction has a cast integral vortex breaker to minimize inlet vortices and the discharge is of the high efficiency tangential type. All RD models allow for rotation of the volute to match field piping and feature back pull-out allowing the removal of the power frame and impeller without disturbing suction or discharge piping.

Impeller: The impeller is of the end suction type, investment casted in one piece of 304 stainless steel or other specified material. Impellers also thread on to the pump shaft eliminating the need for a separate locknut and lockwasher. Integral impeller o-ring ensures that fluid does not leak under the shaft sleeve. Each impeller is trimmed to meet customer requirements and are dynamically balanced prior to assembly. Impellers are furnished standard with back pump out vanes keeping material from building up around the stuffing box and throat area.

Case Wear Ring: The case wear ring is constructed of bronze or other specified material. Standard enclosed impellers are designed with integral case wear ring accurately machined to provide close running tolerances in the casing. The diameter of this ring is such as to reduce end thrust to a minimum. On larger models, a front and back case wear ring are standard.

Shaft: The shaft is of high strength stainless steel machined and polished to a smooth surface. It is designed for extra stiffness to avoid all critical speeds in operation. The shaft is stepped in diameter and so designed as to minimize shaft deflection at the stuffing box.

Shaft Sleeve: The shaft sleeve is of bronze or other specified material and designed to protect the shaft in the stuffing box area.

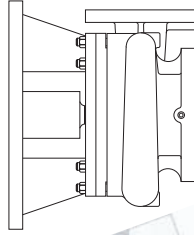
Stuffing Box/Adapter: The stuffing box/adapter is constructed of high tensile ductile iron or other specified material. The pump is designed standard with a component mechanical seal but can be supplied with a cartridge seal or packing if desired. An integral flush line is supplied standard to provide adequate lubrication to the mechanical seal or packing. If packed, the stuffing box is provided with a two piece packed gland and lantern ring.

Bearing Pedestal: RDF models feature a bearing pedestal of high tensile cast iron and provides support for the inboard and outboard bearings. The bearing pedestal is fitted with two single row ball bearings of ample capacity designed to account for radial as well as axial thrust loads in either direction. Each bearing is pressed on to the shaft assuring proper alignment and location. Bearing caps with lip seals provide protection to the bearings by keeping dust and dirt out of the bearing pedestal. Each bearing is of the oil lubricated type for quiet operation and the bearing pedestal has oil level indicator integral for inspection of proper level. Grease lubricated bearings can be supplied upon request.

Motor: RDC models utilize c-face motors. This design allows for the removal of the motor without disturbing any item within the pump. This flexibility allows the user to stock fully assembled wet ends less motors. To remove the motor, the shaft set screws need to be loosened, remove the four bolts that hold the motor in location and then remove the motor. This motor concept allows the user to use nearly any motor enclosure such as ODP, TEFC, explosion proof, Corro-Duty and washdown duty, enclosures that may not be available in other close-coupled designs.

Model RDC Close-Coupled

Sizes: 1/2" to 12"
 Flows: 4,500 GPM
 Heads: 375 Feet
 Temp: 250° F



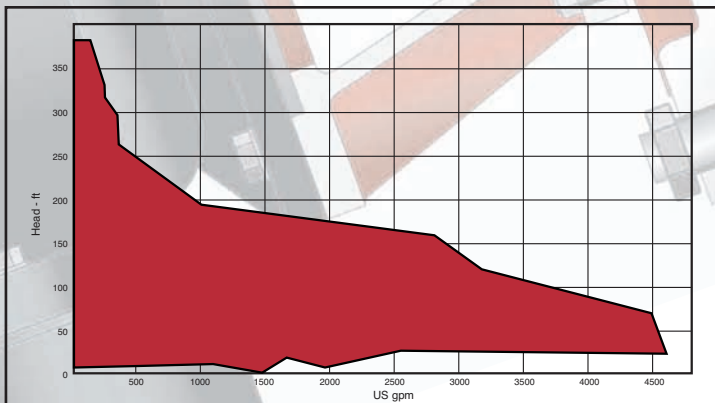
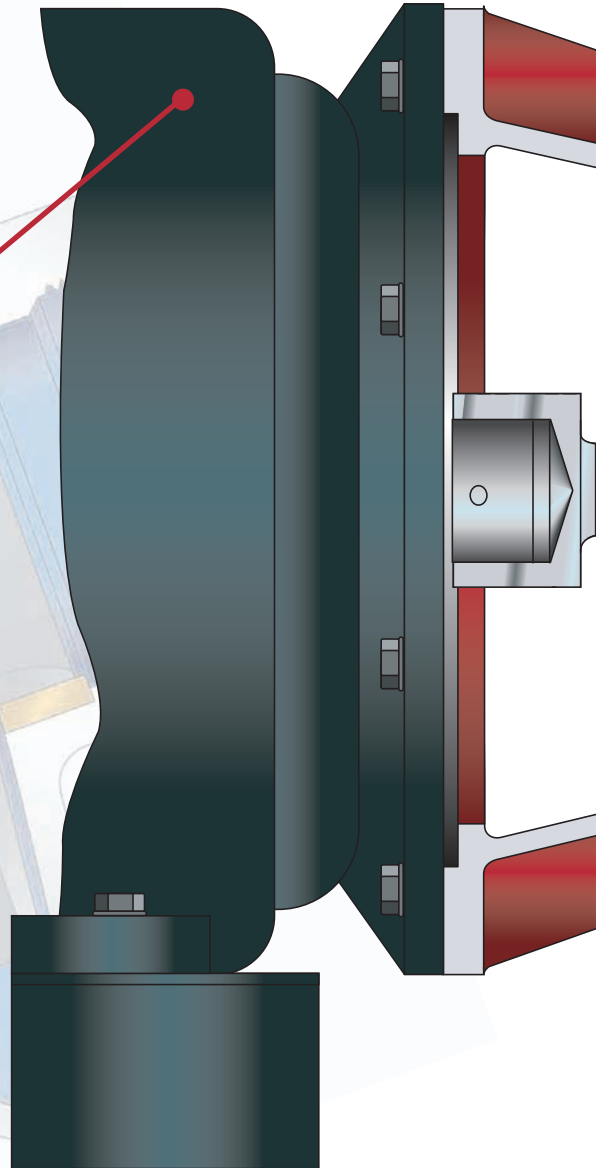
Enclosed Impeller

Services:

-  Aerospace
-  Agriculture & Irrigation
-  Building Trades
-  Chemical
-  Construction
-  Food & Beverage
-  General Industry
-  Marine
-  Mining & Aggregate
-  OEM
-  Oil & Gas
-  Power Generation
-  Petro-Chemical
-  Pharmaceutical
-  Pulp & Paper
-  Semiconductor
-  Water & Wastewater

Motor

- Standard stock C-face motor
- Available in a variety of enclosures including ODP, TEFC, Corro Duty, Washdown Duty and Explosion Proof
- Easily removable without disassembly of entire pump



Stuffing Box/Seal Chamber

- Standard American-Marsh Series 810 Carbon/Silicon-Carbide/Viton mechanical seal or optional packing
- Packing, component or cartridge seals can be specified
- One piece ductile iron or other alloy
- Heavy duty with integral flush line for packing or seal lubrication

Impeller

- Hydraulically balanced
- Back pump out vanes prohibit material from building up behind impeller
- One piece investment casted 304 stainless steel
- Expertly machined to customer specifications
- Fully balanced prior to assembly

Shaft

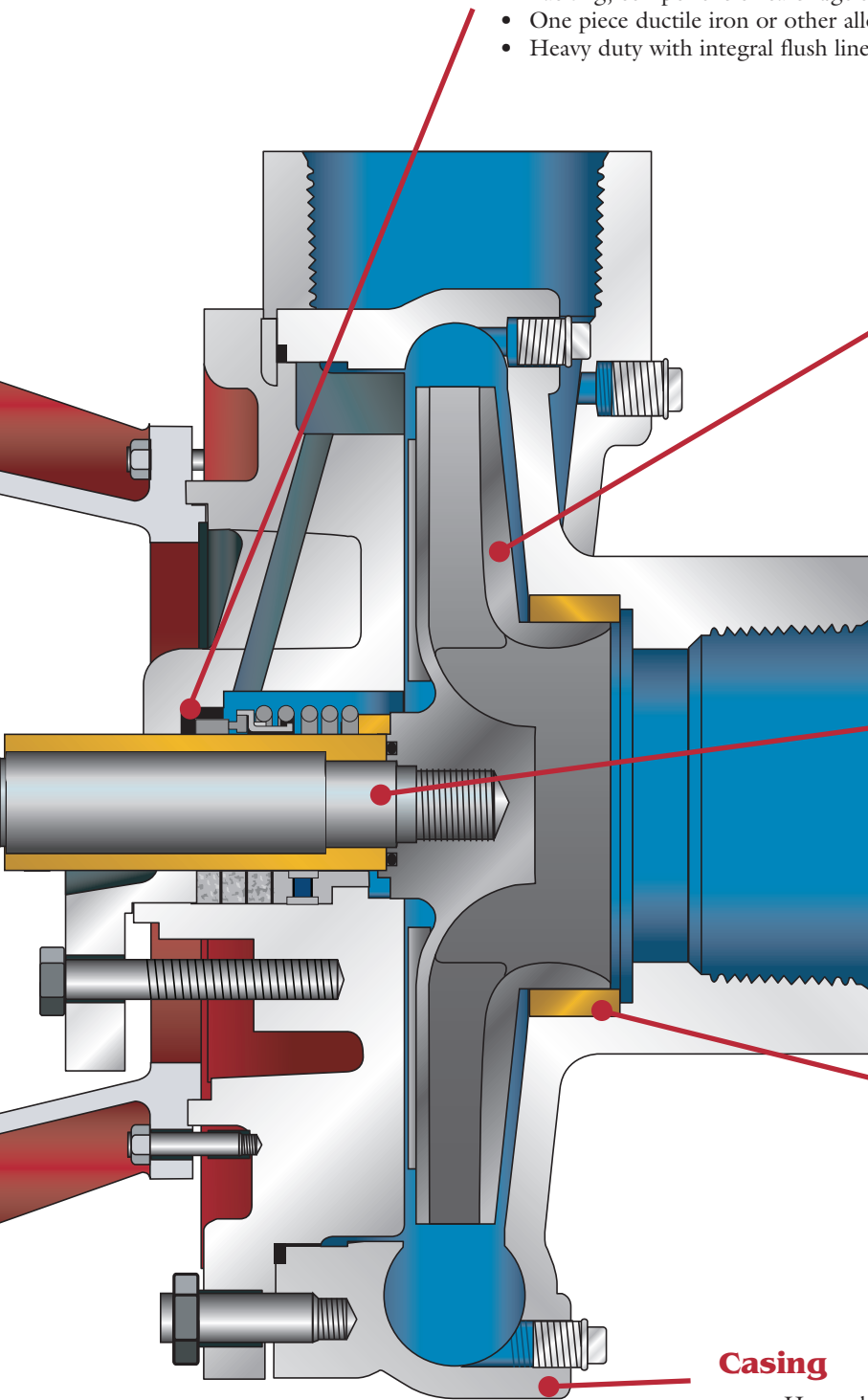
- 420 stainless steel alloy
- Rigid and sized to minimize deflection at seal area

Case Wear Ring

- Standard bronze or other alloy
- Can be easily removed and replaced when worn
- For additional support, larger models have a front and back case wear ring

Casing

- Heavy duty ASTM A536 ductile iron
- High efficiency tangential discharge that allows for full casing rotation to meet piping requirements in the field
- Standard, heavy duty case wear ring
- Heavy wall thickness to provide generous corrosion allowance
- Four tapped locations that allow for multiple vents and drains regardless of how the casing is mounted
- Back pull-out for quick removal of impeller assembly
- Pressure taps on suction and discharge to verify pump performance
- NPT connection through 2-1/2" discharge and flanged connection 3" and above
- Standard 250 lb case working pressure

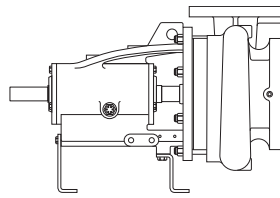


Model RDF Flex-Coupled

Sizes: 1/2" to 12"
Flows: 4,500 GPM
Heads: 375 Feet
Temp: 250° F

Services:

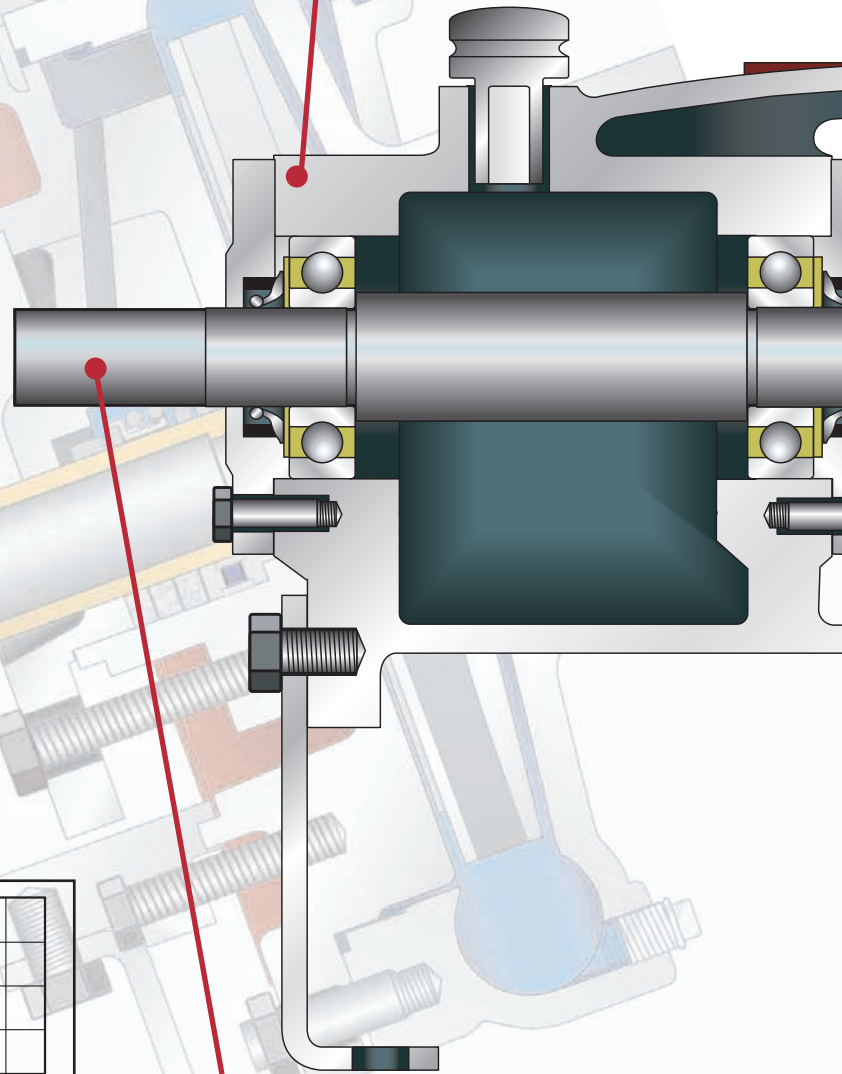
-  Aerospace
-  Agriculture & Irrigation
-  Building Trades
-  Chemical
-  Construction
-  Food & Beverage
-  General Industry
-  Marine
-  Mining & Aggregate
-  OEM
-  Oil & Gas
-  Power Generation
-  Petro-Chemical
-  Pharmaceutical
-  Pulp & Paper
-  Semiconductor
-  Water & Wastewater



Enclosed Impeller

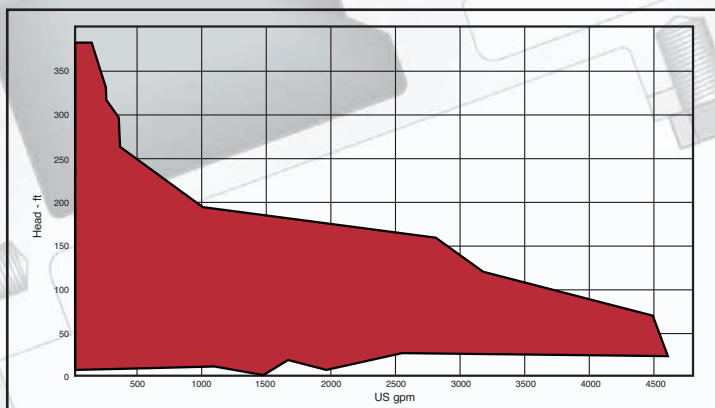
Bearing Pedestal

- Heavy duty ASTM A48 cast iron
- Single row inboard and outboard bearings
- Inboard and outboard bearings are oil lubricated with optional grease lubrication upon request
- Six bearing pedestals cover all 42 models
- Lip seals on each bearing housing cap to keep out contaminants



Shaft

- Designed and sized especially for the pump and its applications
- High strength 420 stainless steel material standard
- Efficiently designed to minimize shaft deflection at the stuffing box



Impeller

- Hydraulically balanced
- One piece investment casted 304 stainless steel
- Expertly machined to customer specifications
- Fully balanced prior to assembly
- Back pump out vanes prohibit material from building up behind impeller

Casing

- Heavy duty ASTM A536 ductile iron
- Heavy wall thickness to provide for generous corrosion allowance
- High efficiency tangential discharge that allows for full casing rotation to meet piping requirements in the field
- Pressure taps on suction and discharge to verify pump performance
- Four tapped locations that allow for multiple vents and drains regardless of how the casing is mounted
- NPT connection through 2-1/2" discharge and flanged connection 3" and above
- Standard 250 lb case working pressure

Case Wear Ring

- Standard bronze or other alloy
- Can be easily removed and replaced when worn
- For additional support, larger models have a front and back case wear ring

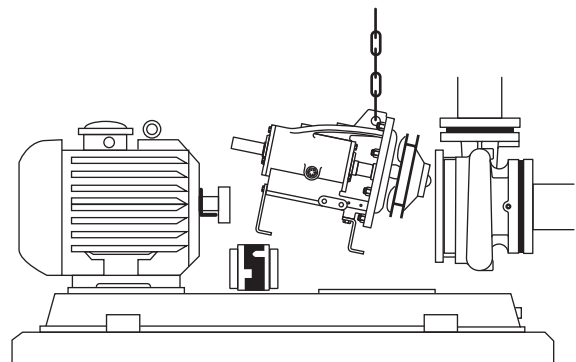
Stuffing Box/Seal Chamber

- Standard American-Marsh Series 810 Carbon/Silicon-Carbide/Viton mechanical seal or optional packing
- Packing, component or cartridge seals can be specified
- One piece ductile iron or other alloy
- Heavy duty with integral flush line for packing or seal lubrication

Shaft Sleeve

- Heavy duty bronze or other alloy
- Protects the shaft from wear
- Can be easily removed and replaced when worn

Back Pull-out Feature



Our long tradition of quality pump manufacturing began in 1873 making us one of the first pump manufacturers in this country. **American-Marsh Pumps** provides the user dependability and durability. Durability by design is always the most cost effective solution.

CASING

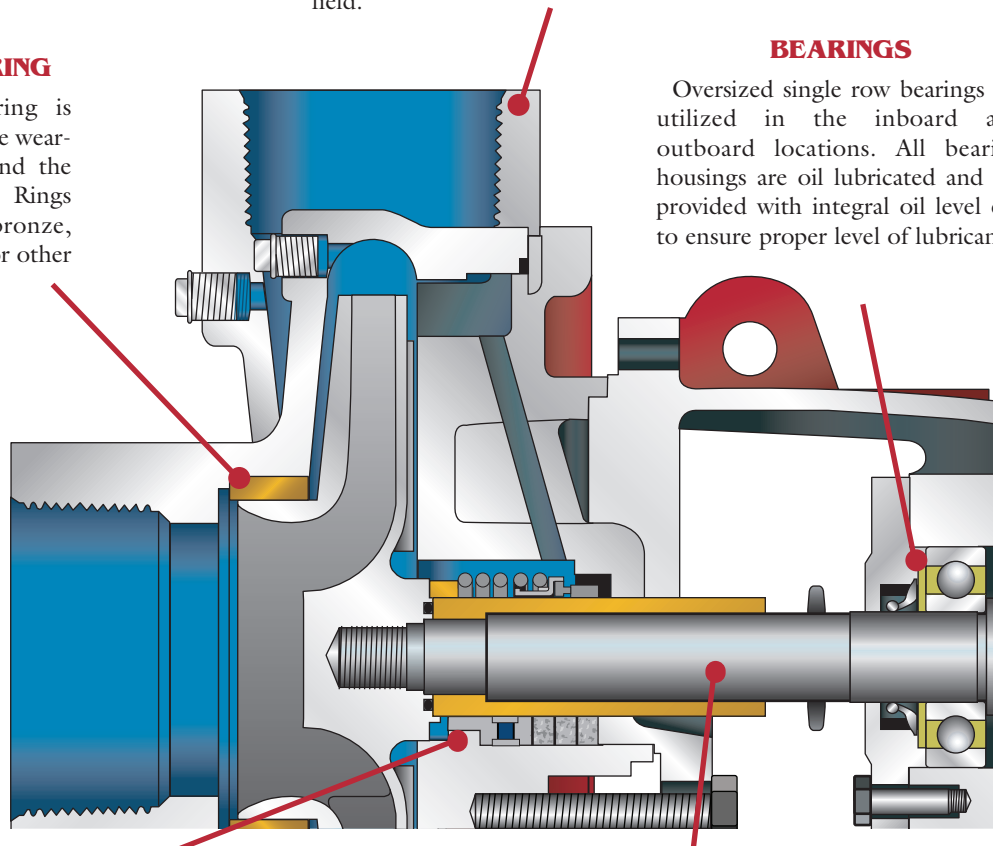
The casing is designed for back pull-out making service easy and is also provided with additional thickness for corrosion allowance. Surfaces are machined to accurate tolerances in our machining centers. Tangential discharge allows for high efficiency operation and flexibility of piping orientations in the field.

CASE WEAR RING

The case wear ring is oversized with a large wearing surface to extend the life of each pump. Rings are available in bronze, iron, stainless steel or other alloys as required.

BEARINGS

Oversized single row bearings are utilized in the inboard and outboard locations. All bearing housings are oil lubricated and are provided with integral oil level eye to ensure proper level of lubricant.



MECHANICAL SEALS/PACKING

Stuffing boxes are supplied standard with a front loading mechanical seal. Due to the flexibility in design, packing and/or cartridge seals can be supplied upon request.

SHAFTS

American-Marsh Pumps standard product design includes 420 stainless steel shafts designed for corrosion resistance and minimum shaft deflection. Each shaft is machined to close tolerance and designed to exceed HP requirements of each pump.

OTHER PUMP PRODUCTS

SPLIT CASE

To 30+\" Discharge
30,000+ GPM, 550'

VERTICAL TURBINE

To 42+\" Bowl
85,000+ GPM, 2000+'

MULTI-STAGE

To 10\" Discharge
2500 GPM, 2100'

SELF PRIMER

To 12\" Discharge
6400 GPM, 260'

VERTICAL SUMP

To 12\" Discharge
9800 GPM, 550'

American-Marsh Pumps

185 Progress Road
Collierville, TN 38017
PH: (800)888-7167
FX: (901)860-2323

Distribution/Service Centers:

Nebraska: 113 South Lincoln Avenue, Hastings, NE 68901 (800)408-7167
California: 3269 East North Building D, Fresno, CA 93725 (800)288-7167
Florida: 2805 Badger Road, Lakeland, FL 33811 (800)444-7167
Louisiana: 1626 Walker Road, Scott, LA 70583 (800)506-7167

www.american-marsh.com